

Appl. No. 10/502,490
Amdt. Dated February 2, 2006
Reply to Office Action of November 1, 2005

Attorney Docket No. 81864.0039
Customer No. 26021

REMARKS

This application has been carefully reviewed in light of the Final Office Action dated November 1, 2005. Claims 1-14 remain in this application. Claims 1 and 10-11 are the independent Claims. Claims 1 and 10-11 have been amended. Claims 15-17 are cancelled, without prejudice. It is believed that no new matter is involved in the amendments or arguments presented herein. Reconsideration and entrance of the amendment in the application are respectfully requested.

Art-Based Rejections

Claims 1-5, 7-11 and 15-17 were rejected under 35 USC §103(a) over Japanese Patent Publication No. JP 06-069032 (Takanabe) in view of USPN 6,420,042 B1 (Sakamoto). Claim 6 was rejected under 35 USC §103(a) over Takanabe and Sakamoto in view of Japanese Patent Publication No. JP 02-143510 (Takada). Claims 12-14 were rejected under 35 USC §103(a) over Japanese Patent Publication No. JP 07-029732 (Saito) in view of Takanabe and Sakamoto.

Applicant respectfully traverses the rejections and submits that the claims herein are patentable in light of the clarifying amendments above and the arguments below.

The Takanabe Reference

Takanabe is directed to a magnetic head having a multilayer magnetic thin film with a first layer of Fe-N and a second layer of Co amorphous alloy. (See *Takanabe, Abstract and Figure 1*).

The Sakamoto Reference

Sakamoto is directed to an Fe-based amorphous alloy thin strip. (See *Sakamoto, Col. 2, line 39*).

Appl. No. 10/502,490
Amdt. Dated February 2, 2006
Reply to Office Action of November 1, 2005

Attorney Docket No. 81864.0039
Customer No. 26021

The Saito Reference

Saito is directed to a thin film magnetic element having specified thickness of a magnetic layer. According to Saito, a soft magnetic layer of 3-5 μ m is formed on a silicon nitride film. (*See Saito, Abstract*).

The Takada Reference

Takada is directed to a high permeability magnetic material having an Fe layer, an FeCo layer disposed on the Fe layer, and a Co layer disposed on the FeCo layer. (*See Takada, Abstract*).

The Claims are Patentable Over the Cited References

The present application is generally directed to a magnetic thin film having high saturation magnetization and exhibits high permeability and a high quality factor Q in the high frequency band of GHz range.

As defined by amended independent Claim 1, a high frequency magnetic thin film includes a first layer comprising a T-L composition, wherein T is Fe or FeCo and L is only C. A second layer includes a Co-based amorphous alloy arranged on either surface of the first layer.

The applied references are not seen to disclose or suggest the above features of the present invention as defined by amended independent Claim 1. In particular, the applied references do not disclose or suggest, "a first layer comprising a T-L composition (here, T is Fe or FeCo, L is only C," as required by amended independent Claim 1.

Takanabe is directed to a magnetic head having a multilayer magnetic thin film with a first layer of Fe-N and a second layer of Co amorphous alloy. (*See Takanabe, Abstract and Figure 1*). Takanabe does not disclose or suggest that the first layer includes C (Carbon). On page 3, the Office Action concedes that Takanabe does not disclose or suggest the use of C (Carbon).

Appl. No. 10/502,490
Amdt. Dated February 2, 2006
Reply to Office Action of November 1, 2005

Attorney Docket No. 81864.0039
Customer No. 26021

The ancillary Sakamoto reference fails to remedy the deficiencies of Takanabe. In Col. 1, lines 26-27, Sakamoto discloses an Fe-based amorphous alloy thin strip comprising an Fe-Si-B ternary alloy. In Col. 5, lines 13-14, Sakamoto discloses an Fe-Si-B-C-based amorphous alloy thin strip. However, Sakamoto fails to disclose or suggest an Fe-C-based or an FeCo-C-based amorphous alloy thin strip, as required by the claims of the present invention. Moreover, Sakamoto does not disclose or suggest a Co-based amorphous alloy arranged on either of the surfaces of the first layer, as required by claims of the present invention. Accordingly, the combination of Sakamoto and Takanabe fails to disclose the features of the present invention as required by the claims.

In contrast to Takanabe and Sakamoto, the claims of the present invention require a first layer comprising a T-L composition, wherein T is Fe or FeCo and L is only C. Support for this feature of the present invention can be found throughout the Applicant's specification. For example, see page 17, lines 23-27.

Similarly, the ancillary Takada and Saito references fail to remedy the deficiencies of Takanabe and Sakamoto.

Since the applied references do not disclose or suggest the above features of the present invention as required by amended independent Claim 1, those references cannot be said to anticipate nor render obvious the invention which is the subject matter of that claim.

Accordingly, independent Claim 1, as amended, is believed to be in condition for allowance and such allowance is respectfully requested.

Independent Claims 10 and 11 have been amended in a similar manner as with amended independent Claim 1 and are, therefore, believed to be in condition for allowance for at least the same reasons as discussed above in reference to Claim 1 and such allowance is respectfully requested.

Appl. No. 10/502,490
Amdt. Dated February 2, 2006
Reply to Office Action of November 1, 2005

Attorney Docket No. 81864.0039
Customer No. 26021

The rejection of Claims 15-17 over Takanabe in view of Sakamoto are moot in view of the cancellation of these claims.

The remaining Claims 2-9 and 12-14 depend either directly or indirectly from the amended independent claims 1 and 10-11 and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references, and are also believed to be in condition for allowance and such allowance is respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6809 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,

HOGAN & HARTSON L.L.P.

By: 

Lawrence J. McClure
Registration No. 44,228
Attorney for Applicant(s)

Date: February 1, 2006

500 South Grand Avenue, Suite 1900
Los Angeles, California 90071
Phone: 213-337-6700
Fax: 213-337-6701